

IN THE CLAIMS:

1. (Currently amended) A lock assembly comprising:

a housing having

an outer surface;

a proximal end;

a central hole with an inner surface defined through the housing;

multiple sets of pin holes defined in the housing and communicating with the central hole, and each set of pin holes having three pin holes arranged in a curve along the outer surface of the housing to ~~achieve form~~ three rows of pin holes in the outer surface of the housing, wherein the three holes of in the sets of pin holes in the housing are ~~respectively~~ referred to respectively as a changing position, an open position and a lock position of the lock assembly;

two main adjusting holes radially defined in the housing, communicating with the central hole and ~~respectively~~ referred to respectively as the changing position and the open position; and

two sub-adjusting holes radially defined in the housing, communicating with the central hole and ~~respectively~~ referred to respectively as the changing position and the open position;

a cylinder rotatably ~~received~~ mounted in the central hole of the housing along a first rotating direction and a second rotating direction opposite to the first rotating direction and having an outer surface abutting ~~with~~ the inner surface of the central hole in the housing to define a rotation interface between the housing and the cylinder;

a proximal end;

a key hole defined in the proximal end;

a main adjusting hole defined in the outer surface of the cylinder, communicating with the key hole and selectively aligning with one of the main adjusting holes in the housing when the cylinder is rotated relative to the housing;

a main adjusting cavity defined in the outer surface of the cylinder, communicating with the main adjusting hole in the cylinder and extending along the first rotating direction;

a sub-adjusting hole defined in the outer surface of the cylinder, communicating with the key hole and selectively aligning with one of the sub-adjusting holes in the housing when the cylinder is rotated relative to the housing;

a sub-adjusting cavity defined in the outer surface of the cylinder, communicating with the ~~main~~ sub-adjusting hole in the cylinder and extending along the second rotating direction; and

multiple pin holes defined in the outer surface of the cylinder, communicating with the key hole, arranged in a row and selectively aligned with one row of the pin holes in the housing when the cylinder is rotated relative to the housing;

a main adjusting pin assembly mounted in the main adjusting holes in the housing and the cylinder to block the rotation interface at the main adjusting holes in the housing and the cylinder when a main key is inserted into the key hole in the cylinder at the open position of the lock assembly;

a sub-adjusting pin assembly mounted in the sub-adjusting holes in the housing and the cylinder to block the rotation interface at the sub-adjusting holes in

the housing and the cylinder when a sub key is inserted into the key hole in the cylinder at the changing position of the lock assembly; and

multiple locking pin assemblies mounted respectively in the set of pin holes in the housing and a corresponding pin hole in the cylinder.

2. (Currently amended) The lock assembly as claimed in claim 1, wherein the main adjusting pin assembly comprises multiple pin blocks ~~received~~ mounted in the main adjusting hole in the cylinder and selectively ~~received~~ mounted in the main adjusting holes in the housing; and

two springs ~~received~~ mounted respectively in the main adjusting holes in the housing to ~~respectively~~ push respectively against the pin blocks ~~received~~ mounted in the main adjusting holes in the housing.

3. (Original) The lock assembly as claimed in claim 2, wherein the pin blocks have different thicknesses.

4. (Original) The lock assembly as claimed in claim 2, wherein the main adjusting pin assembly further has a cap mounted respectively between each respective spring and a corresponding pin block to press against the corresponding pin block.

5. (Currently amended) The lock assembly as claimed in claim 1, wherein the sub-adjusting pin assembly comprises

multiple pin blocks ~~received~~ mounted in the sub-adjusting hole in the cylinder and selectively ~~received~~ mounted in the sub-adjusting holes in the housing; and

two springs ~~received~~ mounted respectively in the sub-adjusting holes in the housing to ~~respectively~~ push respectively against the pin blocks ~~received~~ mounted in the sub-adjusting holes in the housing.

6. (Original) The lock assembly as claimed in claim 5, wherein the pin blocks have different thicknesses.

7. (Original) The lock assembly as claimed in claim 5, wherein the sub-adjusting pin assembly further has a cap mounted respectively between each respective spring and a corresponding pin block to press against the corresponding pin block.

8. (Currently amended) The lock assembly as claimed in claim 1, wherein each locking pin assembly comprises multiple pin blocks ~~received~~ mounted in one of the pin holes in the cylinder and selectively ~~received~~ mounted in a corresponding set of pin holes in the housing; and

three springs ~~received~~ mounted respectively in the corresponding set of the pin holes in the housing to ~~respectively~~ push respectively against the pin blocks ~~received~~ mounted in the pin holes in the housing.

9. (Original) The lock assembly as claimed in claim 8, wherein the pin blocks

have different thicknesses.

10. (Original) The lock assembly as claimed in claim 8, wherein the lock pin assembly further has a cap mounted respectively between each respective spring and a corresponding pin block to press against the corresponding pin block.

11. (Original) The lock assembly as claimed in claim 1, wherein the housing further comprises multiple longitudinal recesses longitudinally defined in the outer surface of the housing and each having a bottom;

the main adjusting holes, the sub-adjusting holes and the pin holes in the housing are defined in the bottoms of the longitudinal recesses; and

multiple lids are mounted respectively in the longitudinal recesses to close the main adjusting holes, the sub-adjusting holes and the pin holes in the bottoms of the recesses.

12. (Currently amended) The lock assembly as claimed in claim 1, wherein the housing further has an opening with an inner surface defined in the proximal end and a curved stop formed on the inner surface of the opening; and

the cylinder further has a stub protruding from the outer surface of the cylinder, ~~received~~ mounted in the opening in the housing and selectively abutting against the stop in the opening.